

**IN THE UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MISSOURI
EASTERN DIVISION**

APPISTRY, INC.,)	
)	
Plaintiff,)	Case No. 4:13-cv-2547-HEA
)	
v.)	PATENT CASE
)	
AMAZON.COM, INC. and AMAZON WEB)	JURY TRIAL DEMANDED
SERVICES, INC.,)	
)	
Defendants.)	

DEFENDANT AMAZON’S OPENING CLAIM CONSTRUCTION BRIEF

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Pursuant to Patent Local Rule 4-5(a) and the Court's Amended Case Management Order,¹ Defendant Amazon respectfully submits its Opening Claim Construction Brief setting forth proposed constructions for claim terms and limitations in Appistry's U.S. Patent Nos. 8,200,746 and 8,341,209.²

PRELIMINARY STATEMENT

Our nation's free enterprise system disfavors monopolies, for good reason. Nevertheless, in an effort to promote the progress of science and useful arts, the Patent Act provides for a sanctioned, but limited, monopoly to patent holders.³ And to protect the public from the harm of monopoly power, our patent laws also define rules to prevent a patent holder from taking as its own that which is freely available in the public domain. Those rules require that a patent monopoly be tightly circumscribed by the words in the claims of the patent.⁴ Thus, understanding the precise meaning and scope of a patent's claims not only assists litigants, it provides notice to the public of the monopoly's boundaries. As the Supreme Court explained in *Festo v. Shoketsu*, "[a] patent holder should know what he owns, and the public should know what he does not."⁵

¹ Dkt. No. 86.

² Notwithstanding its claim construction positions offered here, Amazon will shortly be filing a motion for invalidity under 35 U.S.C. § 101.

³ *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014) ("Congress has enacted patent laws rewarding inventors with a limited monopoly.").

⁴ See *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 373 (1996) ("It has long been understood that a patent must describe the exact scope of an invention and its manufacture to 'secure to [the patentee] all to which he is entitled, [and] to apprise the public of what is still open to them.'") (quoting *McClain v. Ortmyer*, 141 U.S. 419, 424 (1891)); see also *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 730 (2002) ("The patent laws 'promote the Progress of Science and useful Arts' by rewarding innovation with a temporary monopoly. The monopoly is a property right; and like any property right, its boundaries should be clear.").

⁵ *Festo*, 535 U.S. at 731.

Defining the scope of a patent monopoly is a matter of law within the purview of judges, not juries. In its unanimous *Markman v. Westview Instruments* decision, the Supreme Court explained that “the construction of a patent, including terms of art within its claim, is exclusively within the province of the court.”⁶ Today, the Supreme Court reiterated this rule in its *Teva Pharmaceuticals v. Sandoz* opinion.⁷

Within this framework, Amazon respectfully requests that this Court exercise its *Markman*-defined role and clarify the meaning and scope of the asserted claims. Of the unique 275 words in the claims, Amazon presents four claim terms for the Court’s interpretation: “select,” “territory”/“territories,” “process flow,” and “hive engine.”⁸ Absent the Court’s clarification, the boundaries of Appistry’s patents would remain uncertain, thereby preventing the public from knowing where Appistry’s monopoly begins and ends. Amazon’s request seeks no more than Federal Circuit law requires. Indeed, the Federal Circuit proclaimed in its *en banc* decision in *Phillips v. AWH Corp.* that the specification is “the single best guide to the meaning

⁶ *Markman*, 517 U.S. at 372 (citations omitted); *see also Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370, 388-90 (1996) (“We therefore settle inconsistencies in our precedent and hold that in a case tried to a jury, the court has the power and obligation to construe as a matter of law the meanings of language used in the patent claim.”); *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (“When the parties present a fundamental dispute regarding the scope of a claim term, it is the court’s duty to resolve here.”).

⁷ *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, No. 13-853, slip op. at 1 (U.S. Jan. 20, 2015), http://www.supremecourt.gov/opinions/14pdf/13-854_o7jp.pdf (“In *Markman v. Westview Instruments* . . . [w]e held that ‘the construction of a patent, including terms of art within its claims,’ is not for a jury but ‘exclusively’ for ‘the court’ to determine.”) (quoting *Markman*, 517 U.S. at 372).

⁸ Amazon submitted additional terms for claim construction in the parties’ Joint Claim Construction Chart. (Dkt. No 93-1.) Upon further review and in the interest of conserving the Court’s and the parties’ resources, Amazon no longer seeks construction of claim terms that are not specifically discussed in this brief.

of a disputed term,” and is usually “dispositive.”⁹ Amazon thus asks that this Court define the foregoing terms in accordance with the patents’ specification so that the public, including Amazon, may know the true boundaries of Appistry’s monopoly.¹⁰

ARGUMENT

I. THE LEGAL STANDARD GOVERNING CLAIM CONSTRUCTION

In its *en banc* decision in *Phillips v. AWH Corp.*, the Federal Circuit reaffirmed the rule that claims are typically given their plain and ordinary meaning.¹¹ The court warned, however, that a claim term’s ordinary meaning cannot be determined in a vacuum. The Federal Circuit established that “[p]roperly viewed, the ‘ordinary meaning’ of a claim term is its meaning to the ordinary artisan after reading the entire patent.”¹² The Federal Circuit announced in *Phillips* that the patent’s specification is the most important source for determining a claim term’s ordinary meaning: “the specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’”¹³

As part of the specification, the claims of the patent must be considered in every claim construction analysis. As the *Phillips* court explained, “the claims themselves provide

⁹ *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)).

¹⁰ The two asserted patents – U.S. Patent No. 8,341,209 (the “’209 patent”) and U.S. Patent No. 8,200,746 (the “’746 patent”) – are attached hereto as Exhibits 1 and 2. The Appistry patents share virtually identical specifications.

¹¹ *Phillips*, 415 F.3d at 1315 (“We have frequently stated that the words of a claim ‘are generally given their ordinary and customary meaning.’”) (citations omitted).

¹² *Id.* at 1321.

¹³ *Phillips*, 415 F.3d at 1315 (quoting *Vitronics*, 90 F.3d at 1582); *see also Phillips*, 415 F.3d at 1315 (“[T]he best source for understanding a technical term is the specification from which it arose, informed, as needed, by the prosecution history.”) (citing *Multiform Desiccants v. Medzam Ltd.*, 133 F.3d 1473, 1478 (Fed. Cir. 1998)).

substantial guidance as to the meaning of particular claim terms.”¹⁴ For example, the context in which a term is used in an asserted claim can be highly instructive.¹⁵ Similarly, other claims of the patent, both asserted and unasserted, provide valuable enlightenment as to the meaning of a claim term.¹⁶ *Phillips* also explained that courts should consider the written record of communications between the inventor and the Patent Office during the application process, known as the prosecution history, if it is in evidence.¹⁷

In addition to these intrinsic sources, *Phillips* authorized courts to consider extrinsic sources, such as expert and inventor testimony, dictionaries, and treatises.¹⁸ The Federal Circuit has cautioned, however, that conclusory and unsupported expert assertions are not useful.¹⁹

II. THE APPISTRY PATENTS

As modern businesses grow, their computing requirements increase. The Appistry patents recognize this concept, as they describe how banks require greater computing power to process increasingly larger numbers of electronic transactions.²⁰ Before the Appistry patents,

¹⁴ 415 F.3d at 1314.

¹⁵ *Id.* (“[T]he context in which a term is used in an asserted claim can be highly instructive”).

¹⁶ *Id.* (“Other claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term.”).

¹⁷ *Id.* at 1317 (“In addition to consulting the specification, we have held that a court ‘should also consider the patent’s prosecution history, if it is in evidence.’”) (quoting *Markman*, 52 F.3d at 980).

¹⁸ *Id.* (“Although we have emphasized the importance of intrinsic evidence in claim construction, we have also authorized district courts to rely on extrinsic evidence, which ‘consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.’”) (quoting *Markman*, 52 F.3d at 980).

¹⁹ *Id.* at 1318 (“However, conclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court.”).

²⁰ See ’209 patent at 1:30-35 (“Many businesses are demanding faster, less expensive, and more reliable computing platforms. Brokerage houses, credit card processors, telecommunications

numerous solutions existed for increasing the computing power available to businesses and other high-volume users. One such solution described in the Appistry patents was “distributed computing,” or a distributed system of computers.²¹

A UNIX-based system is just one example of a distributed computing system that existed before Appistry applied for its patents. The Appistry patents explain that UNIX servers were linked together in “clusters” that, together, provided increased computing power.²² The Appistry patents also describe a distributed supercomputer as another example of a distributed computing system. The distributed supercomputer worked by breaking up jobs into small pieces that could be spread across and processed by many different computers.²³

The Appistry patents sought to improve on these prior art systems with a system including improved reliability, scalability, and availability.²⁴ In an attempt to achieve these

firms, as well as banks are a few examples of organizations that require tremendous computing power to handle a countless number of small independent transactions.”).

²¹ *Id.* at 1:56-60 (“Currently, when it comes to developing, deploying, and executing mission-critical applications, businesses and other organizations can choose between five alternative platforms. These are mainframes, high-availability computers, UNIX-based servers, distributed supercomputers, and PC’s.”).

²² *Id.* at 2:46-55 (“The 1990s saw the rise of the UNIX-based server as an alternative to mainframes and high-availability computers. These systems have grown in popularity because, in addition to delivering availability and predictability, they also deliver significant levels of scalability. UNIX-based servers deliver degrees of scalability because it is possible to add new machines to a cluster and receive increases in processing power. They also deliver availability because they are typically implemented as clusters and thus can survive the failure of any individual node.”).

²³ *Id.* at 3:15-21 (“A recent development in the world of mission-critical computing is the distributed supercomputer (also known as a Network of Workstations or ‘NOW’). A distributed supercomputers is a computer that works by breaking large problems up into a set of smaller ones that can be spread across many small computers, solved independently, and then brought back together.”).

²⁴ *Id.* at 5:15-19 (“New mechanisms for computing are desired, especially those which may provide a reliable computing framework and platform, including, but not limited to those which

goals, the Appistry patents claim a specific implementation of a distributed computing system.

In particular, the '746 patent claims a system of distributed computing using "hive engines."²⁵

Each "hive engine" is a computer that can automatically join or leave a logical group, or

"territory," of other hive engines.²⁶ This functionality allows hive engines to organize into

logical groups without prior configuration.²⁷ Processing jobs are submitted to the system, and

then distributed to a group of hive engines within at least one of the territories for processing.²⁸

The '209 patent similarly claims a system of distributed computing. Under the '209 patent, computers called request handlers, process handlers, and task handlers perform a processing job.²⁹ The request handler receives a request to process a job, which includes a process flow.³⁰ The process flow is a defined sequence of tasks that must be performed to handle

might produce improved levels of performance and reliability at a much lower cost than that of other solutions."); *see also id.* at 1:63-4:15 (discussing issues of scalability and availability).

²⁵ '746 patent at claim 1.

²⁶ *Id.* at 10:52-56 ("Typically, hive engines participate in an automated self-organization mechanism[], which allows participating hive engines on the same local or wide area network to detect each other and organize into logical groups without any prior configuration."); *id.* at 14:50-52 ("When placed on the same network, hive engines seek each other out to pool resources and to add availability and scalability."); *id.* at claim 1 ("a plurality of networked hive engines, a plurality of the hive engines being grouped into a plurality of territories.").

²⁷ *Id.* at 10:52-56 ("Typically, hive engines participate in an automated self-organization mechanism[], which allows participating hive engines on the same local or wide area network to detect each other and organize into logical groups without any prior configuration.").

²⁸ *Id.* at claim 1 ("wherein at least one of the hive engines is configured to receive a service request for a processing job"; "wherein a plurality of the hive engines within the at least one territory are configured to perform the processing job in a distributed manner such that the processing tasks of the processing job are distributed to a plurality of hive engines within the at least one territory for execution thereby.").

²⁹ '209 patent at claim 1.

³⁰ *Id.*

the processing job.³¹ The request handler chooses one of the process handlers.³² The chosen process handler identifies the next task that needs to be completed.³³ Then one of the task handlers receives the task identified by the process handler and performs the task.³⁴

III. CONSTRUCTION OF DISPUTED TERMS AND PHRASES

A. “select”

Outside the context of the Appistry patents, the term “select” might be interpreted as “choosing among one or more options,” or “choosing among two or more options.” A lay juror could therefore be misled to believe that “select” covers “choosing among one or more options” without guidance from the Court. But the *Phillips* rule requires that “select” be interpreted within the context of the patents. The claims and specification of the Appistry patents establish that Appistry’s patent monopoly only extends to the latter interpretation.³⁵

The asserted claims require two or more process handlers and two or more task handlers. For instance, claim 1 of the ’209 patent requires “a plurality of process handlers” and “a plurality of task handlers.”³⁶ The claims also require that a “request handler” be configured to “select a process handler from among the process handlers.”³⁷ Similarly, the claims require that each process handler be configured “to select a task handler from among a plurality of task

³¹ *Id.* at 12:20-24 (“The hive process flow contains the information on the sequence of sub-routines to be called, timeout and retry information if the sub-routines fail, and which sub-routine to call next based on the sub-routine’s result.”).

³² *Id.* at claim 1.

³³ *Id.*

³⁴ *Id.*

³⁵ The term “select” is used only in asserted claims of the ’209 patent. Attached as Ex. 3 is a listing of all of the claims containing the disputed claim terms.

³⁶ ’209 patent at claim 1.

³⁷ *See, e.g., id.*

handlers.”³⁸ Thus, the claims command that “select” means choosing from a plurality: “choosing among two or more options.”

The rest of the specification confirms this. For example, the specification explains that the request handler selects a process handler from among a plurality of process handlers: “select a process handler from among the process handlers for servicing the processing job.”³⁹

Similarly, the specification explains that a task handler is selected from among a plurality of task handlers: “selecting a task handler from among a plurality of the task handlers for performing the identified processing task.”⁴⁰

Appistry does not dispute Amazon’s proposed construction, but instead contends that the Court need not construe “select.” But, absent a clarifying construction from the Court acting in its *Markman*-defined role, the jury could conclude that the selection of a single option falls within the scope of Appistry’s monopoly, given the common understanding of the meaning of “select” outside the context of the Appistry patents. The plain language of the claims and the remainder of the specification, however, establish that the claims do not cover the selection of an option from a set consisting of only a single option.

³⁸ See, e.g., *id.* at claim 2.

³⁹ ’209 patent at 5:46-56; see also ’746 patent at 6:27-30 (“receive a selection from the computer of a request handler from among the plurality of request handlers that are available to service the service request.”).

⁴⁰ ’209 patent at 6:59-61; see also *id.* at 10:41-48 (“In one embodiment, a volunteer pattern allows a software application . . . to automatically detect a group of software applications on the same network, and to select and communicate with the most appropriate application without any prior knowledge [of] the location and capabilities of the chosen software application.”); *id.* at 11:5-7 (“[T]he client receives unicast UDP packets from the hive engines, selects one, and connects to the hive engine via TCP socket.”); see also ’746 patent at claim 13 (“The system of claim 11 wherein the selected process handler is further configured to (1) send a processing task request to a plurality of task handlers, (2) receive a plurality of responses to the processing task request from a plurality of task handlers, and (3) select at least one of the responsive task handlers based on the territory within which each responsive task handler resides.”).

Accordingly, Amazon respectfully requests that the Court construe “select” to mean “choosing among two or more options.”

B. “territory”/“territories”

Outside the context of the Appistry patents, the terms “territory” and “territories” typically mean geographic locations.⁴¹ A lay juror could therefore be misled to believe that a “territory” only covers geographic locations without guidance from the Court. In accordance with the *Phillips* rule, however, “territory” and “territories” must be interpreted within the context of the Appistry patents. And the Appistry patents establish that these terms have a broader meaning in the context of the Appistry patents: “a logical grouping based on any characteristic.”

The specification says that a territory can be defined by any characteristic or quality, such as physical location, communication system, or electrical system. Indeed, the specification sets forth the breadth of “territory” and “territories” by offering examples of a wide variety of characteristics that can potentially define “territory”:

The process handler proceeds to perform the processing job, and at intermediate steps within the process flow, the process handler communicates state information to the request engine, such that the state and progress of the processing job at discrete steps is known by multiple processes, typically on different physical hive engines, and possibly in different **territories** (which may be defined to be in physically different locations, or using different communications, and/or electrical systems, etc.).⁴²

...

The use of territories 210 and 216 provides a mechanism for associating a physical location or quality of a corresponding hive engine which can be used, for

⁴¹ The terms “territory” and “territories” are used in asserted claims of the ’209 and ’746 patents.

⁴² ’209 patent at 12:41-49 (emphasis added); ’746 patent at 12:1-9 (same).

example, in determining which responding request or process handlers to select via a volunteer pattern.⁴³

The specification's use of these examples concerning territories is critical under longstanding Federal Circuit law. The Federal Circuit has held time and again that a construction that excludes examples disclosed in the specification is rarely, if ever, correct.⁴⁴ Amazon's proposed construction appropriately encompasses the examples disclosed here.

Appistry does not dispute Amazon's proposal, but instead contends that the Court need not construe "territory" and "territories." However, absent a clarifying construction from the Court acting in its *Markman*-defined role, a jury might incorrectly conclude that a "territory" is limited to a physical location, the meaning typically associated with the word. As explained above, within the context of the Appistry patents, a "territory" is not so limited.⁴⁵ Appistry's proposal that "territory" and "territories" simply be construed as "plain meaning" is therefore not helpful. The purpose of claim construction – to assist the trier of fact in understanding the scope of the claims – will be achieved by interpreting "territory" and "territories" to avoid jury

⁴³ '209 patent at 16:29-33; '746 patent at (15:55-59) (same).

⁴⁴ See, e.g., *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1305 (Fed. Cir. 2007) ("We normally do not interpret claim terms in a way that excludes disclosed examples in the specification."); *Helmsderfer v. Bobrick Washroom Equip., Inc.*, 527 F.3d 1379, 1383 (Fed. Cir. 2008) ("[O]ur court has cautioned against interpreting a claim term in a way that excludes disclosed embodiments, when that term has multiple ordinary meanings consistent with the intrinsic record.").

⁴⁵ See '209 patent at 12:41-49 ("The process handler proceeds to perform the processing job, and at intermediate steps within the process flow, the process handler communicates state information to the request engine, such that the state and progress of the processing job at discrete steps is known by multiple processes, typically on different physical hive engines, and possibly in different **territories** (which may be defined to be in physically different locations, or using different communications, and/or electrical systems, etc.)") (emphasis added); '746 patent at 12:1-9 (same); '209 patent at 16:29-33 ("The use of territories 210 and 216 provides a mechanism for associating a physical location or quality of a corresponding hive engine which can be used, for example, in determining which responding request or process handlers to select via a volunteer pattern."); '746 patent at (15:55-59) (same).

confusion.⁴⁶ Accordingly, Amazon respectfully requests that the Court construe “territory” and “territories” to mean “a logical grouping based on any characteristic.”

C. “process flow”

“Process flow” is not a commonly understood term.⁴⁷ A lay juror is unlikely to understand the meaning of a “process flow,” and the scope of Appistry’s patent monopoly, without guidance from the Court. The Appistry patents repeatedly and consistently define “process flow” as “a defined sequence of steps that are required to handle a processing job.”⁴⁸ In accordance with the *Phillips* rule, “process flow” must be construed consistently with the patents’ definition.⁴⁹

⁴⁶ *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (explaining that claim construction is “a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims.”); *O2 Micro*, 521 F.3d at 1362 (same).

⁴⁷ The term “process flow” is only used in the asserted claims of the ’209 patent.

⁴⁸ See ’209 patent at 12:20-24 (“[P]rocess flow contains the information on the sequence of sub-routines to be called, timeout and retry information if the sub-routines fail, and which sub-routine to call next based on the sub-routine’s result.”); *id.* at 23:33-38 (“Fig. 6B illustrates an example definition of a[] process follow 620 “doProcessOne” used in one embodiment. Shown are four process flow statements 621-624, each specifying its beginning state, tasks to be performed, and next state depending on the outcome of the statements execution.”); *id.* at Fig. 6B; *id.* at Fig. 6C (“attempt to perform task associated with current state”).

⁴⁹ See *Nystrom v. TREX Co., Inc.*, 424 F.3d 1136, 1145 (Fed. Cir. 2009) (“Nystrom consistently used the term ‘board’ to refer to wood cut from a log. Although there was no clear disavowal of claim scope, there was nothing in the intrinsic record to support the conclusion that a skilled artisan would have construed the term ‘board’ more broadly than a piece of construction material made from wood cut from a log.”); see also *Kinetic Concepts, Inc. v. Blue Sky Medical Group*, 554 F.3d 1010, 1018-19 (Fed. Cir. 2009) (refusing to adopt a construction that would expand a claim term beyond the scope of anything described in the specification); *AquaTex Indus. v. Techniche Solutions*, 419 F.3d 1374, 1379-1382 (Fed. Cir. 2005) (limiting scope of claim term based on consistent disclosure of specification).

Each of the independent claims in the '209 patent says that a process flow is part of a processing job.⁵⁰ The claims also say that a process flow includes processing tasks.⁵¹ Thus, a process flow must include the steps, or tasks, for a processing job.

The rest of the specification further explains the meaning of “process flow.” The specification states that the process flow contains a defined sequence of steps to be executed: “process flow contains the information on the sequence of sub-routines to be called, timeout and retry information if the sub-routines fail, and which sub-routine to call next based on the sub-routine’s result.”⁵² Figure 6B, which illustrates a “definition” file that defines a process flow, further illustrates this concept.⁵³

⁵⁰ See '209 patent at claim 1 (“the processing job comprising a process flow”); *see also id.* at claim 26 (“the processing job comprising a process flow”); *id.* at claim 50 (“the processing job comprising a process flow”).

⁵¹ See, e.g., *id.* at claim 1 (“the process flow including (1) a plurality of processing tasks”); *see also id.* at claim 26 (“the process flow including (1) a plurality of processing tasks”); *id.* at claim 50 (the process flow including (1) a plurality of processing tasks”).

⁵² *Id.* at 12:20-24.

⁵³ *Id.* at 23:33-38 (“Fig. 6B illustrates an example definition of a[] process follow 620 “doProcessOne” used in one embodiment. Shown are four process flow statements 621-624, each specifying its beginning state, tasks to be performed, and next state depending on the outcome of the statements execution.”).

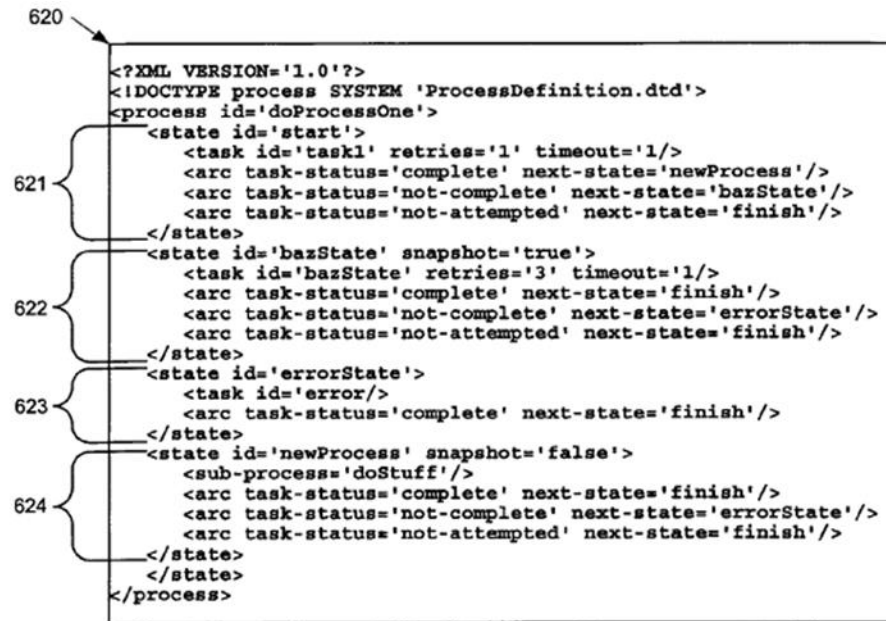


FIGURE 6B

As shown above, the process flow definition file contains four process flow statements, 621, 622, 623, and 624.⁵⁴ Each process flow statement identifies (1) its beginning state, (2) tasks to be performed, and (3) the next state depending on the outcome of the process flow statement's execution.⁵⁵ Thus, through a series of "if-then" statements, the process flow definition file defines the sequence of events required to process a job.

For example, in process flow statement 621, the beginning state is "start."⁵⁶ Process flow statement 621 defines "task 1" as the task to be performed.⁵⁷ After task 1 is performed, the outcome of task 1's execution determines the next step. If task 1 was completed, then the flow

⁵⁴ *Id.*

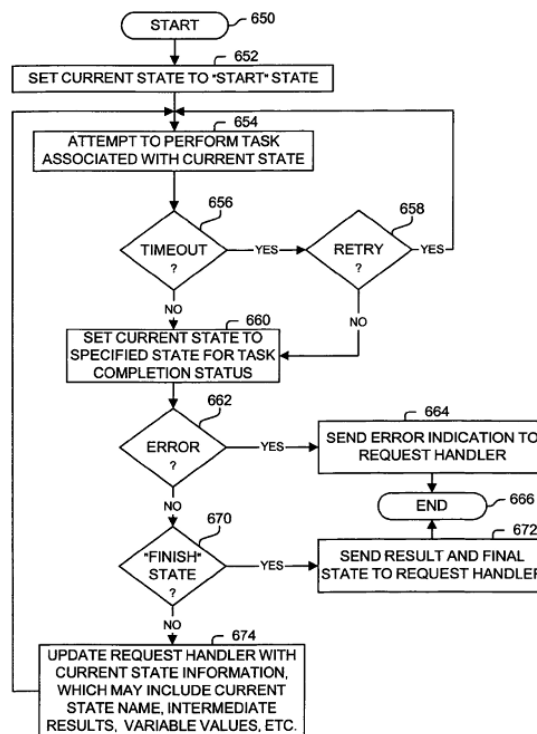
⁵⁵ *Id.*

⁵⁶ *Id.* at Fig. 6B ("state id = 'start'").

⁵⁷ *Id.* ("task id = task 1").

proceeds to process flow statement 624.⁵⁸ If task 1 was not completed, then the flow proceeds to process flow statement 622.⁵⁹ Finally, if task 1 was not attempted, then the flow proceeds to the state “finish.”⁶⁰ Accordingly, each process flow statement sets out the step(s) to be performed in that statement, and what has to happen next. As such, a defined sequence of steps comprises a process flow.

The execution of an exemplary process flow in Fig. 6C further supports that a process flow is a defined sequence of steps for handling a processing job.⁶¹



⁵⁸ *Id.* (“arc task-status = ‘complete’ next-state= ‘newProcess’”); *see also id.* (defining the state id of process flow statement 624 as “newProcess.”).

⁵⁹ *Id.* (“arc task-status= ‘not-complete’ next-state= ‘bazState’”); *see also id.* (defining the state id of process flow statement 622 as “bazState.”).

⁶⁰ *Id.* (“arc task-status= ‘not-attempted’ next-state= ‘finish’”). Although Fig. 6B does not include a “finish” process flow statement, Fig. 6C does.

⁶¹ *Id.* at 23:33-34 (“Figure 6C illustrates a process used in one embodiment for executing a process flow or a processing job . . .”).

As shown above, the system attempts to perform the “task associated with the current state” in step 654. Thus, tasks must be associated with states. Moreover, the state dictates, or defines, the task to be performed. To be sure, step 654 above states that the system “attempt[s] to perform [the] task associated with [the] current state.” In this way, Fig. 6C also shows that a process flow is a defined sequence of steps.

Amazon’s proposed construction is also consistent with the ordinary meaning of “process flow” in the prior art. The Federal Circuit endorses reliance on disclosures in the prior art to ascertain the meaning of claim terms: “Even when prior art is not cited in the written description or the prosecution history, it may assist in ascertaining the meaning of a term to a person skilled in the art.”⁶² Here, U.S. Patent No. 5,321,605 (the “’605 patent”), which the Patent Office issued eight years before Appistry first applied for a patent, describes a process flow system. The ’605 patent defines “process flow” as “an ordered collection of processes which, when realized, achieves an organizational goal.”⁶³ Similarly, an IBM software product user manual dated four years before Appistry first applied for a patent defines a “process flow” as “the sequence of processing steps that are required to handle a request.”⁶⁴

Appistry does not dispute Amazon’s proposed construction, but instead asserts that the Court need not construe “process flow.” But as explained above, a lay juror is unlikely to understand the meaning of “process flow” without guidance from the Court. Accordingly, Amazon respectfully requests that the Court exercise its *Markman*-defined role and construe

⁶² *Arthur A. Collins, Inc. v. Northern Telecom Ltd.*, 216 F.3d 1042, 1044-45 (Fed. Cir. 2000).

⁶³ Ex. 4, AMZN-AWS000016940-16964 at 3:39-47.

⁶⁴ Ex. 5, AMZN-AWS000016965-17092 at AMZN-AWS000016998.

“process flow” to mean “a defined sequence of steps that are required to handle a processing job.”

D. “hive engine”

The term “hive engine” has no plain and ordinary meaning outside of the ’746 patent.⁶⁵ The *Phillips* rule thus commands that the disclosures of the specification determine the meaning and scope of the term. The specification consistently and repeatedly describes a “hive engine” as “a computer that automatically seeks out and joins one or more other computers.”⁶⁶ Thus, “hive engine” must be construed in accordance with this definition set forth in the patent.⁶⁷

The specification explains that a “hive engine” is a computer or computing device: “[a] hive 100-101 is a logical grouping of one or more hive engines (e.g., computers or other computing devices)”⁶⁸ But a hive engine must be more than a mere “computer” or “computing device.” To be sure, the patentees coined the specific phrase “hive engine” for the claims instead of using those widely understood terms. Construing a “hive engine” as nothing

⁶⁵ The term “hive engine” is only used in the asserted claims of the ’746 patent.

⁶⁶ See ’746 patent at 10:52-56 (“Typically, hive engines participate in an automated self-organization mechanism[], which allows participating hive engines on the same local or wide area network to detect each other and organize into logical groups without any prior configuration.”); *id.* at 14:50-52 (“When placed on the same network, hive engines seek each other out to pool resources and to add availability and scalability.”).

⁶⁷ *Nystrom*, 424 F.3d at 1145 (“Nystrom consistently used the term ‘board’ to refer to wood cut from a log. Although there was no clear disavowal of claim scope, there was nothing in the intrinsic record to support the conclusion that a skilled artisan would have construed the term ‘board’ more broadly than a piece of construction material made from wood cut from a log.”); see also *Kinetic Concepts*, 554 F.3d at 1018-19 (refusing to adopt a construction that would expand a claim term beyond the scope of anything described in the specification); *AquaTex Indus.*, 419 F.3d at 1379-1382 (limiting scope of claim term based on consistent disclosure of specification).

⁶⁸ ’746 patent at 14:37-38.

more than a computer or computing device would read the term “hive” out of the phrase “hive engine,” a practice that the Federal Circuit strongly disfavors.⁶⁹

The specification also explains that a hive engine automatically seeks out and joins other hive engines:

Typically, hive engines participate in an automated self-organization mechanism[], which allows participating hive engines on the same local or wide area network to detect each other and organize into logical groups without any prior configuration.⁷⁰

...

When placed on the same network, hive engines seek each other out to pool resources and to add availability and scalability.⁷¹

Thus, the specification supports that a “hive engine” is a computer that automatically seeks out and joins one or more other computers.

Appistry’s U.S. Patent No. 8,060,552, which is incorporated into the ’746 patent by reference, confirms that this construction is correct.⁷² Patentees often include material in a patent by reference in order to avoid duplication errors and unnecessarily lengthening the patent. As

⁶⁹ See, e.g., *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 951 (Fed. Cir. 2006) (rejecting claim construction argued and explaining that the proposed “claim construction would read the height limitation out of the claim altogether.”); *Deering Precision Instruments, L.L.C. v. Vector Distrib. Sys.*, 347 F.3d 1314, 1324 (Fed. Cir. 2003) (“We agree with the district court’s claim construction only in part because the district court’s claim construction effectively reads the term ‘substantially’ out of the claims This error, however, is harmless”); *Apple Computer, Inc. v. Articulate Sys., Inc.*, 234 F.3d 14, 25 (Fed. Cir. 2000) (“The claim interpretation [appellee] asserts focuses on the words following ‘help access window’ and ignores the limitation imposed by the word ‘help.’ The undeniably broad statement recited in claim 2 . . . simply cannot read the qualifier ‘help’ out of the definition of ‘help access window.’”); *Ethicon Endo-Surgery v. U.S. Surgical Corp.*, 93 F.3d 1572, 1582 (Fed. Cir. 1996) (“Ethicon’s reliance on other claim language to overcome this fact invites us to read its ‘during staple firing’ limitation out of the claim. This we cannot do.”).

⁷⁰ ’746 patent at 10:52-56.

⁷¹ *Id.* at 14:50-52.

⁷² *Id.* at 1:8-13.

the Federal Circuit explained in *Advanced Display Systems v. Kent State*, “[i]ncorporation by reference provides a method for integrating material from various documents into the host document . . . by citing such material in a manner that makes clear that the material is effectively part of the host document as if it were explicitly contained there.”⁷³ Because material incorporated by reference effectively becomes part of the patent, it comprises intrinsic evidence that must be considered during claim construction.⁷⁴ The ’552 patent repeatedly describes a “hive engine” as a computer that automatically seeks to join other hive engines:

A self-organizing hive of computing engines is used to process information. A network communicatively couples multiple of hive engines together. These hive engines are configured to self-organize into a cooperative hive for performing computing of client jobs, with the cooperative hive including a multiple processing regions and request region.⁷⁵

Appistry again does not dispute Amazon’s proposed construction, but argues that the Court need not construe “hive engine.” The term “hive engine,” however, will have no meaning to a jury without the Court’s claim construction. Accordingly, Amazon respectfully requests that the Court exercise its *Markman*-defined role and construe “hive engine” as “a computer that automatically seeks out and joins one or more other computers.”

⁷³ *Advanced Display Sys. Inc. v. Kent State Univ.*, 212 F.3d 1272, 1282 (Fed. Cir. 2000).

⁷⁴ *See Sys. Div., Inc. v. Teknek LLC*, 59 Fed. Appx. 333, 340, 2003 U.S. App. LEXIS 3288 (Fed. Cir. Feb. 21, 2003) (“That patent was incorporated by reference in its entirety into the ’073 patent, thus rendering the ’714 patent intrinsic evidence with respect to the patents-in-suit.”); *cf. Kumar v. Ovonic Battery Co.*, 351 F.3d 1364, 1368 (Fed. Cir. 2003) (“Our cases also establish that prior art cited in a patent or cited in the prosecution history of the patent constitutes intrinsic evidence.”).

⁷⁵ ’552 patent at Abstract; *see also id.* at 5:16-22; *id.* at claim 1.

CONCLUSION

Amazon's proposed constructions appropriately define the scope of Appistry's patent monopoly in accordance with the patent claims and specification. Accordingly, Amazon respectfully requests that the Court adopt Amazon's proposed constructions.

Date: January 20, 2015

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on January 20, 2015, I caused true and correct copies of the foregoing to be served via the Court's CM/ECF system upon all counsel of record.

By: /s/ Alan M. Fisch